

531,558

Rec'd PCT/PTC 14 APR 2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



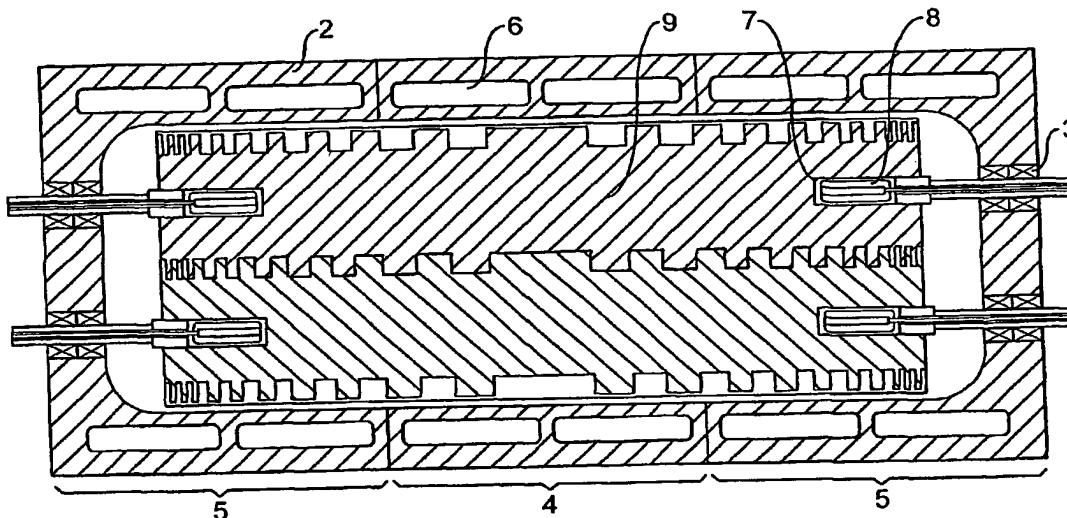
(43) International Publication Date
29 April 2004 (29.04.2004)

PCT

(10) International Publication Number
WO 2004/036049 A1

- (51) International Patent Classification⁷: **F04C 29/04**, 18/16, 18/12, 29/10
- (21) International Application Number: PCT/GB2003/004415
- (22) International Filing Date: 10 October 2003 (10.10.2003)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 0223769.1 14 October 2002 (14.10.2002) GB
- (71) Applicant (for all designated States except US): **THE BOC GROUP PLC** [GB/GB]; Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **RANSOM, Kevin, Michael** [GB/GB]; 15 Longlands Glade, Charmandean, Worthing, West Sussex BN14 9NR (GB). **TUNNA, Clive, Marcus, Lloyd** [GB/GB]; Pendle Cottage, The Street, Bolney, West Sussex RH17 5QW (GB). **SKEATES, John, William** [GB/GB]; 40 Exeter House, Putney Heath, London SW15 3SX (GB). **PALMER, Cliff, Charles** [GB/GB]; 21 Amberley Road, Horsham, West Sussex RH12 4LJ (GB). **NORTH, Michael, Henry** [GB/GB]; 115 Blackborough Rd, Reigate, Surrey RH2 7DA (GB).
- (74) Agent: **BOOTH, Andrew, Steven**; The BOC Group Plc, Chertsey Road, Windlesham, Surrey GU20 6HJ (GB).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- with international search report
 - before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SCREW PUMP



(57) Abstract: A pump comprises a stator and at least one rotor mounted within a housing. The housing comprises a first fluid channel extending about the rotor, the rotor comprising at least one second fluid channel. A first sensor is configured to output a signal indicative of the temperature of the stator; and a second sensor is configured to output a signal indicative of the temperature of the rotor. The temperature of fluid in the channel is controlled depending on the magnitude of signals output from the sensors.

WO 2004/036049 A1